as short as possible and twist them together with about 2 to 3 twists per foot. This minimizes radiated interference from the cables.

7.2 Troubleshooting guide

Problem and Symptoms	Possible Cause	Solution
Low AC output voltage 95-105 VAC.	Using standard voltmeter.	Use true RMS averaging meter.
No output voltage and LED indicator is red.	Overload.	Reduce load.
No output voltage, LED indicator is red.	High input voltage.	Make sure that inverter is connected to 12 V battery. Check regulation of charging system.
No output voltage, no lights.	Car lighter fuse, Inverter lighter cable fuse or interconnect cable fuse open.	Check and replace.
Low battery alarm on all the time, LED indicator is red.	Low input voltage.	Make sure that inverter is connected to 12 V battery. Check regulation of charging system.
	Poor DC wiring, poor battery condition.	Recharge battery. Use proper cable and make solid connections. Use new battery.

8. Maintenance

Very little maintenance is required to keep your inverter operating properly. You should clean the exterior of the unit periodically with a dry cloth to prevent accumulation of dust and dirt. At the same time, tighten the screws on the DC input terminals.

9. Warranty

This product is covered by Carmanah Technologies (Go Power!) 12 month standard warranty.

Visit gpelectric.com for additional information.

Before contacting Go Power!'s customer service department, please visit gpelectric.com to read the "frequently asked questions" section of our website to troubleshoot the problem. If trouble persists:

1. Call your Go Power!™ Technical Support team (1-866-247-6527)
2. Return defective product to place of purchase.

Go Power!®

GP-175

User Manual

300 watt Power Inverter

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Document: MAN_GP-175_vB

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6.2 Overload

The fault LED will come on when the power inverter has shut itself down because its output circuit has been short-circuited or drastically overloaded. Switch the ON/OFF switch to OFF, correct the fault condition, and then switch the ON/OFF switch back to ON.

Some induction motors used in refrigerators, freezers, pumps and other motor operated equipment require very high surge currents to start. The power inverter may not be able to start some of these motors, even though their rated current draw is within the power inverter.

If the motor refuses to start, observe the battery voltage indicator while trying to start the motor. If the battery voltage indicator drops below 11 volts while the inverter is attempting to start the motor, this may be why the motor will not start. Make sure that the battery connections are good and that the battery is fully charged. If the connections are good and the battery is charged, but the voltage still drops below 11 volts, you may need to use a larger battery.

6.3 Input voltage

The power inverter will operate from input voltage ranging 10 V – 15 V. If the voltage drops below 10.7 V, an audible low battery warning will sound and the fault LED will be on. The power inverter will shut down if the input voltage drops below 10 V. This protects your battery from being over discharged.

The power inverter will also shut down if the input voltage exceeds 15 V. This protects the inverter against excessive input voltage. Although the power inverter incorporates protection against over voltage, it may still be damaged if the input voltage is allowed to exceed 20 V.

7. Troubleshooting

7.1 Common problems

a) Buzz in audio systems
Some inexpensive stereo systems will emit a buzzing noise from their loud speak ers when operated from the power inverter. This is because the power supply in the device does not adequately filter the modified sine wave produced by the power inverter. The only solution is to use a sound system that incorporates a higher quality power supply.

b) Television interference
Operation of the power inverter can interfere with television reception on some channels. If this situation occurs, the following steps may help to alleviate the problem.

- Do not operate high power loads with the power inverter while watching television.
- Make sure that the antenna feeding your television provides an adequate (“snow free”) signal and that you are using good quality cable between the antenna and the television.
- Move the television as far away from the power inverter as possible.
- Keep the cables between the battery and the power inverter

Caution
Do not connect this inverter and another AC source (generator or utility power) to the AC wiring or AC loads at the **same** time. Doing so will destroy the inverter and void the warranty, regardless whether the inverter is switched on or off. If you are using more than one AC source for the AC wiring or AC loads, it is highly recommended that you install an automatic transfer switch (GP-TS), available from Go-Power Electric Inc.

Please consult your automobile owners manual for the fuse rating of your lighter. It is recommended that you DO NOT exceed a load of 100 watts for a 10 Amp fuse and 140 Watts for a 15 amp fuse when using your car lighter to power this inverter.

To hook-up please follow these guidelines:

1. Unpack and inspect your Go Power! Inverter, check to see that the power switch is in the OFF position.

2. Insert DC input plug into any 12 V DC car lighter receptacle.

3. Set the power switch to the ON position. The power status LED should be green.

4. Set the power inverter switch to the OFF position. The indicator lights may blink and the internal alarm may sound momentarily. This is normal. Plug the test load into the AC receptacle on the front panel of the inverter. Leave the test load switch OFF.

5. Set the power inverter switch to the ON position and turn the test load on; the inverter should supply power to the load. If you plan to measure the output voltage of the inverter, a true rms meter must be used for accurate readings.

5. Operation

To operate the power inverter, turn it on using the ON/OFF switch on the front panel. The power inverter is now ready to deliver AC power to your loads. If you are operating several loads from the power inverter, turn them on separately after the inverter has been turned ON. This will ensure that the power inverter does not have to deliver the starting currents for all the loads at once.

5.1 Controls and indicators

The ON/OFF switch turns the control circuit in the power inverter ON and OFF. It does not disconnect power from the power inverter.

When the switch is in the OFF position, the power inverter draws no current from the battery. When the switch is in the ON position but with no load, the power idle current is approximately 1 A (see product specifications for exact current draw).

6. Operating limits

6.1 Overtemp

The fault LED will come on when the inverter has shut itself down because the inverter has become overheated. The power inverter may overheat because it has been operated at power levels above it's rating, or because it has been installed in a location that does not allow it to dissipate heat properly. The power inverter will restart automatically once it has cooled off.

1. Introduction

The Go Power! Inverter series provides mobile power for people on the go. Run standard AC appliances wherever you travel. Silent, lightweight and simple to use, Go Power! Inverters can be used in a wide range of applications including remote homes, RVs, boats and long haul trucks. It will operate most televisions and VCR's, personal computers and small appliances including drills, sanders, grinders, mixers, blenders and microwaves. The inverter **must** have a greater power rating than the load to which it is providing power.

To get the most out of your power inverter, it must be installed and used properly. **Please read the instructions in this manual before installing and using your inverter.**

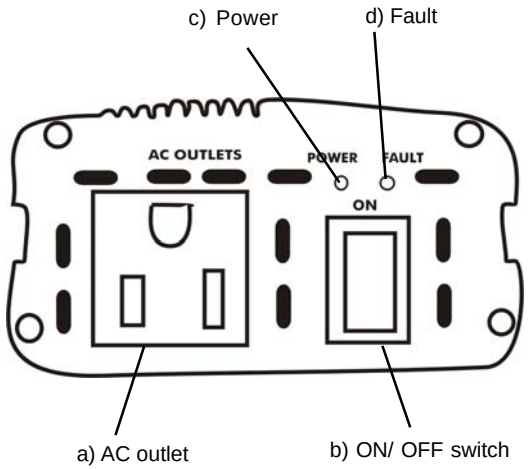
2. Specifications

2.1 GP-175 Inverter

	12V
Output	175 W
Output wave form	Modified Sine Wave
Output voltage	115 VAC rms
Regulation	+5%-10%
DC input voltage	10-15 V
Low battery alarm ± 2%	10.5 V
Low battery shut-down ±2%	10.0 V
Efficiency	80-90%
Frequency ±1%	60 Hz
No load current	0.2 A
Surge rating	210 W
Over thermal protection	Yes
Cooling fan	No
Overload protection	Yes
Dimensions (LxWxH)	125 x 82 x 45 mm 5" x 3.25" x 1.8"
Net weight	0.5 kg 1.1 lbs
Inverter Install Kit	Included

3. Features

3.1 Front view – GP-175



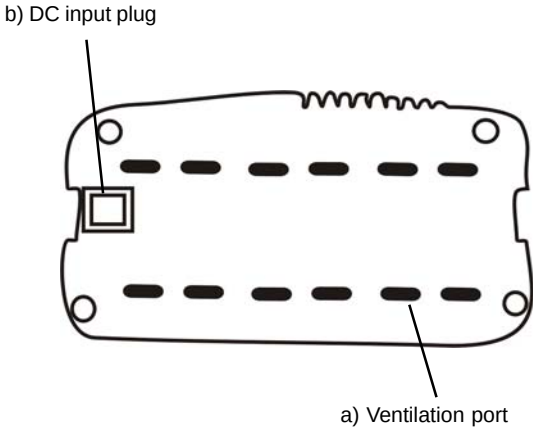
a) AC outlet:
Outlet sockets available: North America

b) ON/ OFF switch:
Leave in the OFF position during installation.

c) Power:
Lights green when GP-175 inverter is on.

d) Fault:
Lights red when fault has occurred.

3.1 Rear view – GP-175



a) Ventilation port:
Do not obstruct, allow at least 1 inch for air flow.

b) DC input plug:
Plugs into any car lighter.

4. Installation

4.1 Where to install

The power inverter should be installed in a location that meets the following requirements:

a) Dry - Do not allow water to drip or splash on the inverter.

b) Cool - Ambient air temperature should be between 0°C and 40°C (the cooler the better).

c) Ventilated - Allow at least two inches of clearance around the inverter for airflow. Ensure the ventilation openings on the rear and bottom of the unit are not obstructed.

d) Safe - Do not install the inverter in the same compartment as batteries or in any compartment capable of igniting flammable liquids such as gasoline.

e) Inverter should be located within 10 feet of the batteries.

4.2 Hook-up and testing

*** Important:** The DC car lighter input cable includes a 15 Amp fuse. Most North American car lighters are rated between 10 - 15 Amps DC and are fused in the automobile fuse box.